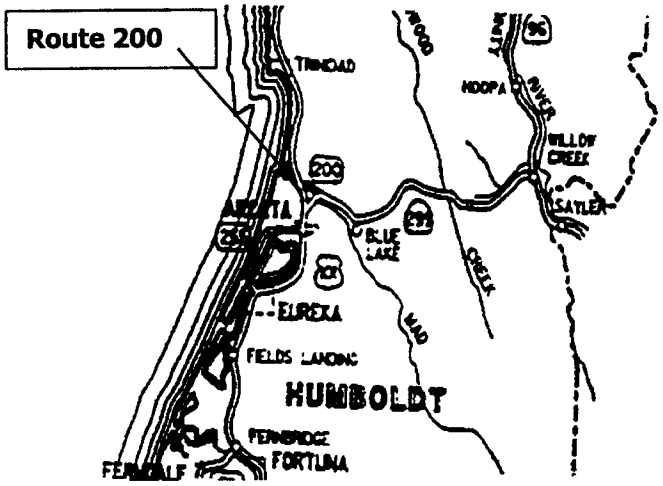
ROUTE CONCEPT REPORT



ROUTE 200 CORRIDOR

01-HUM-200-KP R0.0/R4.3 (PM R0.0/R2.7)

All information in this Route Concept Report is subject to change as conditions change and new information is obtained.

I approve this Route Concept Report to guide today's route development decisions and/or recommendations.

Approval Recommended:

F A Wythe 11/19/99

F. A. WYTHE **Date**
District Division Chief
Project Coordination

Approval Recommended:

Cheryl S. Willis 11/10/99

CHERYL S. WILLIS **Date**
District Division Chief
Planning

Approved:

Rick Knapp 11/23/99

RICK KNAPP **Date**
District Director
District 1

NOVEMBER 1999

ROUTE CONCEPT REPORT

Statement of Planning Intent

The Route Concept Report (RCR) is a planning document which describes the Department's basic approach to development of a given transportation route or corridor. Considering reasonable financial constraints and projected travel demand over a 20-year planning period, the RCR defines appropriate transportation facilities for each route or corridor. The objective of the effort is to provide a better basis for the development of the State Transportation Improvement Program (STIP), and for determination of the appropriate concept for future transportation projects.

Route Concept Reports are prepared by District staff in cooperation with local and regional agencies. They will be updated as necessary as conditions change or new information is obtained.

Route Concept Reports are a preliminary planning phase that lead to subsequent programming and the project development process. As such, the specific nature of proposed improvements (e.g., roadway width, number of lanes, access control) may change in the project development stage.

Assumptions

The following assumptions form the basis for the development of Route Concept Reports:

1. The relative importance of State highways in the District is generally based on functional classification. In general, higher priority is given to major improvements on principal arterial routes as compared to minor arterials and collectors.

2. State highways with improvement concepts must have realistic concept levels of service. Concept levels of service are not established on State highways which will only be maintained (since improvements would not be made to address level of service concerns).

3. Level of service calculations are based on the 1994 Highway Capacity Manual (see Appendix A).

4. Determinations of future level of service for State highways in District 1 are based in part upon Statewide and Regional forecasts of State highway travel developed by Caltrans.

5. Route concepts are generally uniform for an entire route or corridor, unless there is a major change in function along the route or corridor.

6. Major projects will be developed to meet standards acceptable to the Federal Highway Administration in order to receive Federal funding for projects. Otherwise, a "design exception" will be prepared during the project development process.

7. Safety projects will be pursued on an on-going basis in order to be responsive to safety concerns as they are identified.

8. No planned or programmed improvements were assumed to be complete in analyzing present and future operating conditions. The Route Concept Report details programmed improvements in the 1998 STIP, with all costs in 1998 dollars.

9. An environmental document will not be required for Route Concept Reports. However, individual improvement projects identified in Route Concept Reports will follow the appropriate environmental process as required by law.

ROUTE CONCEPT REPORT

ROUTE 200

01-HUM-200-KP R0.0/R4.3 (PM R0.0/R2.7)

I. ROUTE CONCEPT AND RATIONALE

FACILITY CONCEPT

The concept for Route 200 in Humboldt County from Route 101 to Route 299 is a 2-lane conventional highway on existing alignment.

Route 200 provides a connecting link between Route 101 and Route 299 for through traffic while serving local traffic along the Route. It also serves as a bypass for trucks too heavy or too tall for the Mad River Bridge #4-25 on Route 101 and provides access to Azalea State Reserve at HUM-200-KP 0.8 (PM 0.5).

LEVEL OF SERVICE CONCEPT

No concept Level of Service has been selected for Route 200; improvements would not be made to address level of service reductions if they were to occur.

ROUTE CONCEPT FUNCTION

This Route Concept should serve as a guide for long range planning of Route improvements. It will protect the state's investment in Route 200, while recognizing financial constraints, which will not allow the programming of extensive improvements for all highways.

II. ROUTE MANAGEMENT STRATEGY

REHABILITATION STRATEGY

Route 200 should be maintained as necessary.

Based on functional classification, traffic volumes, and maintenance service levels, Route 200 in District 1 should be maintained as necessary at its present width and on existing alignment. Portions of the Route may be rehabilitated on an exception basis, when maintaining the facility would be less cost effective than rehabilitating it.

This Route may be resurfaced, as necessary, through the Capital Preventative Maintenance Program (CAPM).

SAFETY AND OPERATIONAL IMPROVEMENT STRATEGY

The Route 200, as described below, has an accident rate greater than 1.5 times (150% of) the expected Statewide average:

01-HUM-200-KP R0.0/R4.3 (PM R0.0/R2.7)

Safety improvements at spot locations will be considered as necessary.

Bridge replacement, storm damage and operational improvement projects will also be considered as necessary. These projects, in addition to safety projects, should be constructed to appropriate State and Federal standards.

In the late 1980's, Caltrans barrier striped two-lane highways to comply with Federally mandated standards. This reduced the number of passing opportunities (and the level of service) on most two-lane State highways, including Route 200. The impact of barrier stripping is expected to be less severe on Route 200 than on some other Routes within the District, since few passing opportunities existed prior to barrier stripping.

GOODS MOVEMENT STRATEGY

The primary goods movement use for Route 200 is as a bypass for trucks too heavy or too tall for the Mad River Bridge #4-25 on Route 101. It also serves some local goods movement trips, primarily light trucks.

Consistent with the relatively low truck traffic volumes on this Route, no goods movement improvements are planned at this time.

NON-MOTORIZED FACILITIES STRATEDY

Shoulders and lanes on Route 200 are relatively narrow in many locations and not well suited to non-motorized traffic.

A shoulder widening project is under construction at HUM 200-KP R0.2/0.8 (PM 0.3/1.2) to provide widening for bicycle safety and improve drainage facilities.

Due to the high cost of improvements and the relatively low volume of non-motorized traffic, further bicycle and pedestrian facility improvements on this Route are likely to be considered a low priority. If additional needs are identified, we will work with Humboldt County Association of Governments to facilitate improvements

CORRIDOR PRESERVATION STRATEGY

It is anticipated that Route 200 will remain a conventional 2-lane highway, on existing alignment. No substantial long-term right of way needs are anticipated.

III. ALTERNATIVE CONCEPTS CONSIDERED

No alternative concepts were considered for Route 200 in District 1.

IV. ROUTE ANALYSIS

DESCRIPTION

In District 1, Route 200 originates at Route 101 just north of the Mad River. It continues eastward for 4.3 kilometers (2.7 miles), ending at Route 299. The post mile description is 01-HUM-200-KP R0.0/R4.3 (PM R0.0/R2.7).

ROUTE PURPOSE

Route 200 primarily serves local traffic, but is also used as a bypass around Mad River Bridge #4-25 (on Route 101) for trucks with extra legal loads. It also serves recreational traffic and provides access to Azalea State Reserve (a day use only State Park) and the Mad River. The Route experiences light non-motorized traffic.

ROUTE SEGMENTATION

Route 200 has one segment for System Planning purposes:

TABLE I
ROUTE 200 SEGMENTATION

SEG #	HUM 200		DESCRIPTION
	KP	PM	
1	R0.0/R4.3	R0.0/R2.7	Jct. Rte. 101 to Jct. Rte. 299

LAND USE

Azalea State Reserve is adjacent to Route 200 at approximately post mile HUM-200-KP 0.8 (PM 0.5) where day use access to the park is provided. Little development has occurred along this route, and land use is generally open space and scattered low density residential. No major development along Route 200 is anticipated.

EXISTING FACILITIES

Table II on the following page will summarize the existing facility characteristics for the Route 200 corridor in District 1.

TABLE II
EXISTING FACILITY CHARACTERISTICS
ROUTE 200

SEG #	HUM 200		DESCRIPTION	EXISTING FACILITY
	KP	PM		
1	R0.0/R4.3	R0.0/R2.7	Jct. Rte. 101 to Jct. Rte. 299	2-C

F = Freeway
E = Expressway
C = Conventional

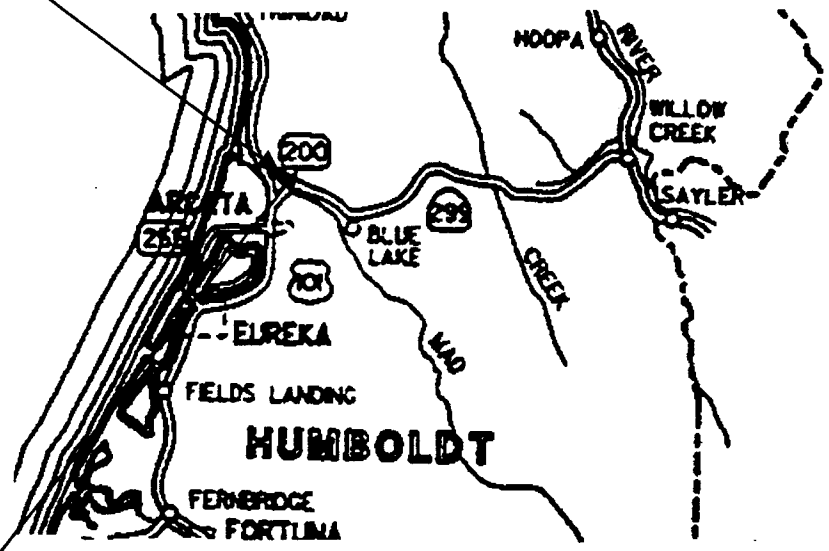
Functional Classification	Rural Major Collector
Eligible for Federal Funding	Yes
Freeway and Expressway System:	No
Eligible for Scenic Highway Designation	No
Subsystem of Highways for Extra Legal Loads (SHELL)	Yes
Surface Transportation Assistance Act (STAA) Trucks Allowed	No
Strategic Highway Network	No
National Highway System	No
Interregional Road System	No
Public Airports Served	None
Rail Service	None
Intercity Bus Service	None
Intersecting State Highway Routes	101, 299
Park and Ride Lots	None

OPERATING CONDITIONS

Present and future operating conditions, including traffic volume ranges, level of service, and volume to capacity ratios for both existing and anticipated future conditions for Route 200 are shown on Map 1 on the following page. Further information regarding specific operating and geometric conditions may be found in Caltrans source documents (e.g., the State Highway Inventory, the State Highway Log, and Traffic Volumes on California State Highways, etc.)

MAP 1
PRESENT AND FUTURE OPERATING CONDITIONS
ROUTE 200

HUM-200
KP R0.0/R4.3
PM R0.0/R2.7
Terrain: Rolling
Gradeline: Rolling
Existing (1998)
2- lane Conventional
3.0 to 3.6 m lanes
6.1 to 9.8 m paved
1800-2200 AADT
"C" LOS
V/C = 0.13
Accident Rate = greater than 1.5 times the Statewide average
Trucks = 5%
Future (2020)
2000-2400 AADT
"C" LOS
V/C = 0.14



PROGRAMMED IMPROVEMENTS

There are no programmed improvements in the 1998 State Transportation Improvement Program (STIP) or the 1998 State Highway Operation and Protection Program (SHOPP).

There is a minor project to improve curve alignment at HUM-200-KP-3.1/3.9 (PM 1.9/2.4) near the east end of the Route at a cost of approximately $1,400,000.

III. ENVIRONMENTAL CONSIDERATIONS

Environmental Considerations along Route 200 include:

- The Mad River, a recreational wild and scenic river, provides important instream and riparian habitat. There are sensitive species associated with the river and its tributaries including a variety of federally listed plants and animals.

- Significant archaeological and cultural sites along the Mad River where local Native American tribes gathered food and materials necessary for everyday life, sites where their ancestors lived and sacred sites associated with religious activity.

- The water quality of the Mad River is of significant concern.

VI. REGIONAL TRANSPORTATION PLANNING

The 1996/98 Humboldt County Regional Transportation Plan authored by the Humboldt County Association of Governments calls for long-term maintenance of State Highway Routes. Maintenance issues were noted as follow:

1. Some improvements are necessary to improve alignment, grade and safety, particularly in substandard areas.

2. Passing lanes are needed in some areas to mitigate Federal barrier stripping standards.

3. Capacity improvements are recognized as not likely, except on Route 101.

VII. AREAS OF CONCERN

The following criteria are used to identify areas of concern on Route 200 based on an analysis of level of service and accident history:

1. A segment is considered to be a "level of service concern" if the concept level of service (LOS) will not be achieved under present or future traffic conditions, or the segment operates at capacity during peak hour.

2. A segment is considered to be a "safety concern" if the total accident rate for a five year period for that segment exceeds one and one-half times the Statewide average for similar facilities.

Based on these criteria, one segment of was identified as an area of concern, due to accident history: HUM-200-KP R0.0/R4.3 (PM R0.0/R2.7). The District has an established accident surveillance and monitoring process, which investigates and recommends safety improvements for specific locations with historic accident concerns as they are identified.

VIII. IMPROVEMENTS NECESSARY TO ACHIEVE THE ROUTE CONCEPT

Consistent with the route concept of Maintain Only, no new facility improvements will be required. Safety improvements should be made, as necessary and operational improvements should be considered on a limited basis.

IX. TRANSIT AND HIGH OCCUPANCY VEHICLE (HOV) CONSIDERATIONS

Low population densities make it difficult to provide cost-effective transit services for Route 200. Due to the rural nature of Route 200, and relatively low peak hour traffic volumes during commute hours, no HOV considerations are necessary.

X. ACCESS MANAGEMENT

Access management involves managing where vehicles are allowed to enter the highway, to improve highway operations and reduce accidents.

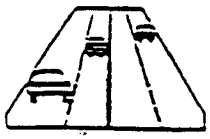
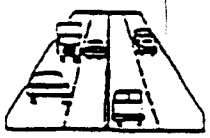
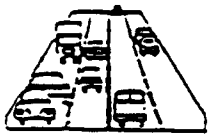
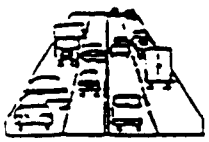
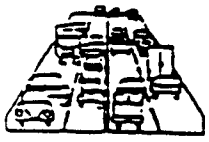
While some access openings may have less than desirable sight distance, access management is generally not a concern along most of Route 200. Further, with little change in land use anticipated, access management is not likely to be a future concern.

XI. ADOPTIONS, RESCISSIONS AND RELINQUISHMENTS

New or changed highway routings generally require adopting a new route and rescinding the previously adopted route. The Route may also be relinquished to a city, county or other public entity.

No significant adoptions, recessions, or relinquishments are anticipated on Route 200 in District 1.

APPENDIX A
LEVEL OF SERVICE
FOR HIGHWAY SEGMENTS

Level of Service	Description of Typical Traffic Conditions	Technical Descriptors: Delay	Technical Descriptors: Service Rating
A 	Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed, and a high level of comfort and convenience.	None	Excellent
B 	Stable traffic flow - speed becoming slightly restricted. The presence of others in the traffic stream begins to be noticeable. Low restriction on maneuverability.	None	Very Good
C 	Stable traffic flow, but less freedom to select speed, change lanes, or pass. Comfort and convenience decreasing as density increases.	Minimal	Good
D 	Approaching unstable flow. Speeds tolerable, but subject to sudden and considerable variation. Reduced maneuverability, driver comfort, and convenience.	Minimal	Adequate
E 	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort and convenience.	Significant	Fair
F 	Forced traffic flow. Speed and flow may drop to zero with high densities. Queues tend to form behind such locations since arrival flows exceed traffic discharges.	Considerable	Poor